

MYACADEMYPT



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KATEGORIT

⦿ Aktivitet Fizik

- C'do aktivitet fizik qe kerkon levizjen e mases muskulare dhe te nevojave energjitike per te kryer levizjen.

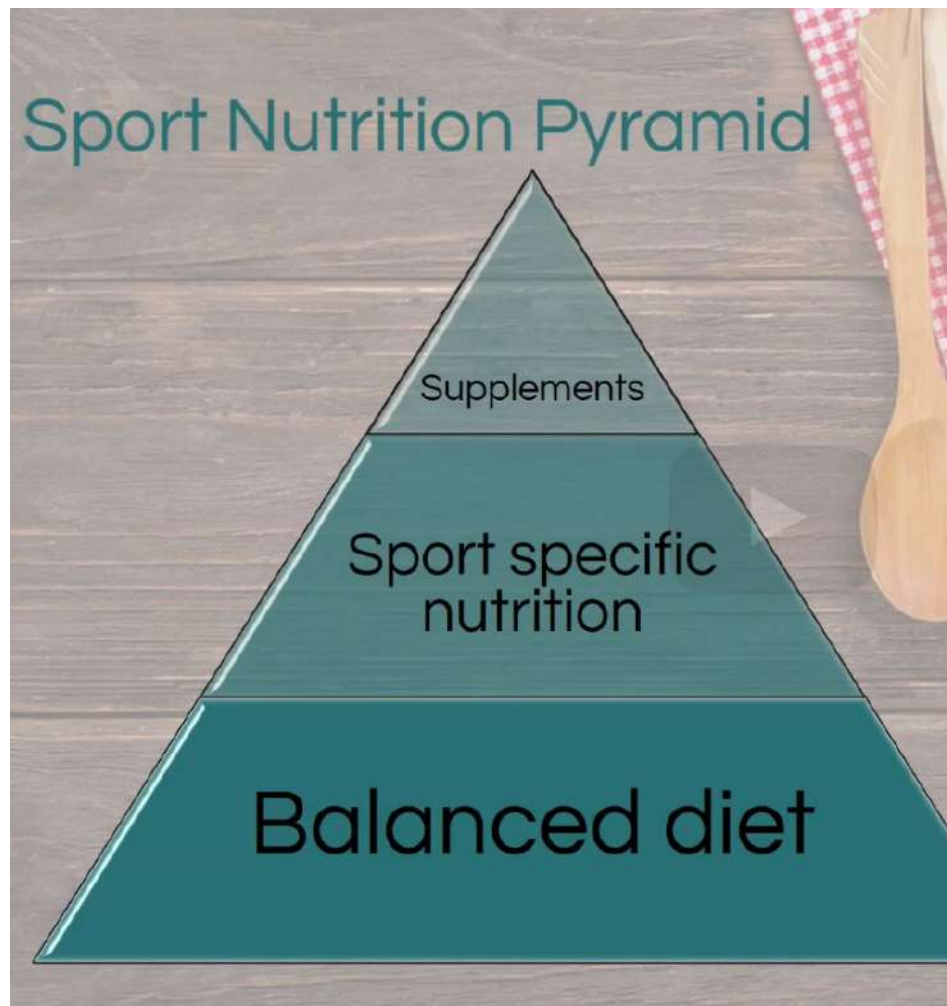
⦿ Stervitje

- Stervitja eshte pjese e aktivitetit fizik. Duhet te kete nje qellim specifik si permiresimi apo mirembajten fizike dhe rritja e performances apo te qenit mire fizikisht.
- Ndaj, duhet te kete nje plan stervitore, strukture dhe te jete I perseritur. Te jete me min. me intesitet te moderuar per te patur efekt permiresimi/mirembajtje

⦿ Sport

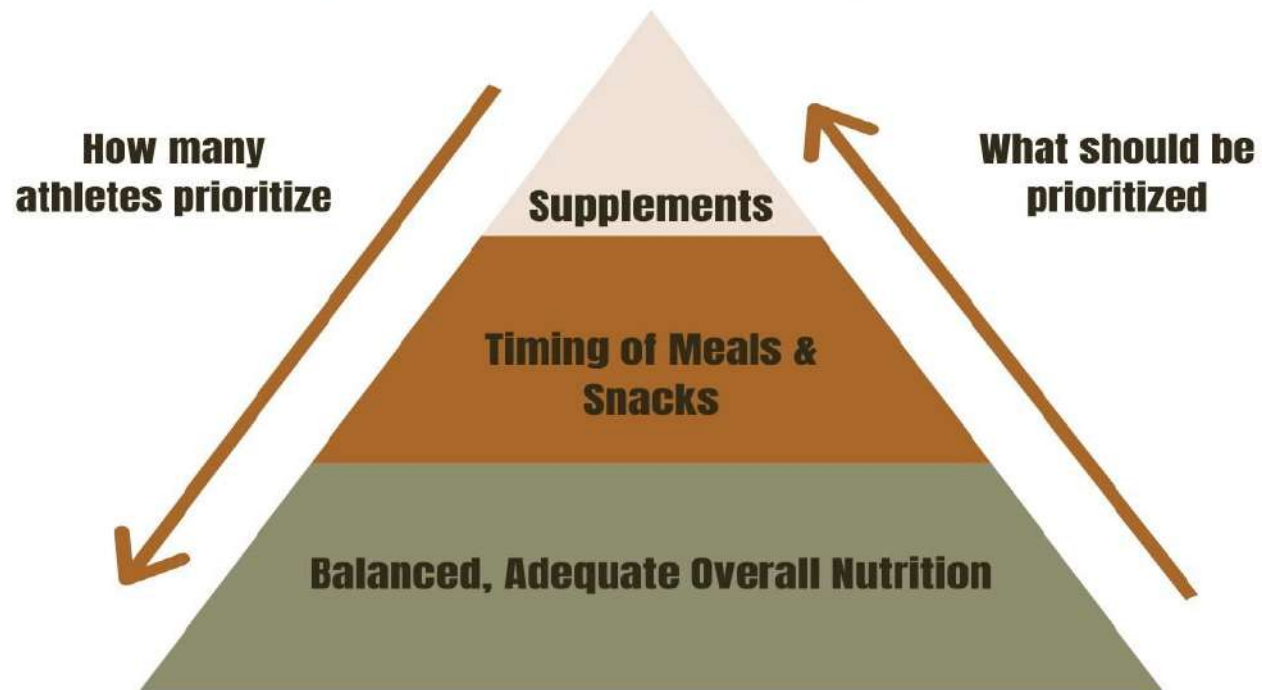
- Elementi vendimtare I sportit eshte kompeticioni.

PIRAMIDA USHQIMORE E SPORTIT



CFARE NDODHE NE FAKT

Sports Nutrition Pyramid



The sports nutrition pyramid by many athletes (and supplement companies)

Evidence-based approach by sports dietitians and other experts



How would you build a pyramid?

TIPOLOGJITE E AKTIVITETIT FIZIK

- **Metabolizmi energjitik**
 - Sistemi energjitik Fosfagjeni
 - Sistemi anaerobik
 - Sistemi aerobik

PESHENGRITJA

- Energji shperthyes
- Disa sekonda
- Muskujt dhe masa trupore

FOKUS NUTRICIONAL

Marrja e proteins eshte e rendesishme



SPRINTER

- Energji
- Nga disa sekonda-20sec.
- Sistemi energjistik Fosfagjeni

FOKUS NUTRICIONAL

Marrja e proteines dhe kreatines



ATLET I DISTANCAVE TE MESME

- Disa minuta
- Sistemi anaerobic
- Prodhim te acidit galaktik
- Shkakton ulje te performances

FOKUS NUTRICIONAL

Kontroll I rezervave energjitike- kapacitet
buferik me ane te suplemete



Atlete Rezistence

- Sistemi aerobik
- 10-15 min -deri ne disa ore
- Sistemi kardiovaskular-respirator
ndermjet oksigjenit dhe nutrienteve

FOKUS NUTRICIONAL

Marrja e karbohidrateve para dhe gjate
aktivitetit



GAME PLAYER

- Sprinter te shumta
- Rikuperim te kufizuar
- Kohezgjatje te lojes
- Sfide per te gjitha sistemet energjitike
- Sistemi Aerobik I kombinuar ate afatshkurter dhe ate afatgjate

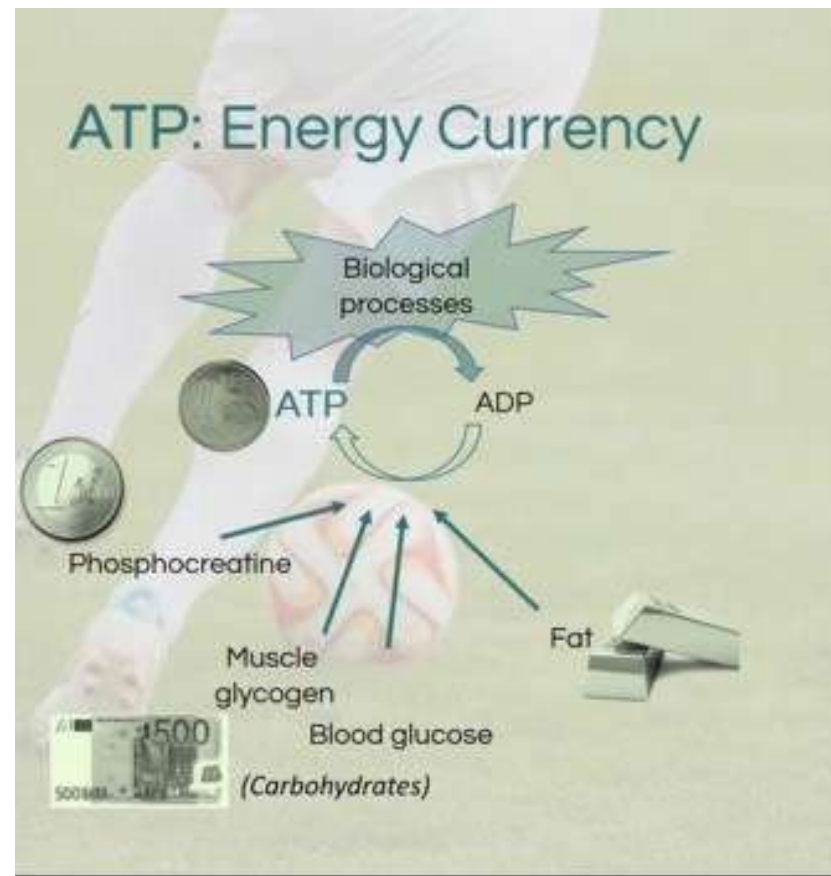
FOKUS NUTRICIONAL

Depo energjitike, protein,
fosfokreatin

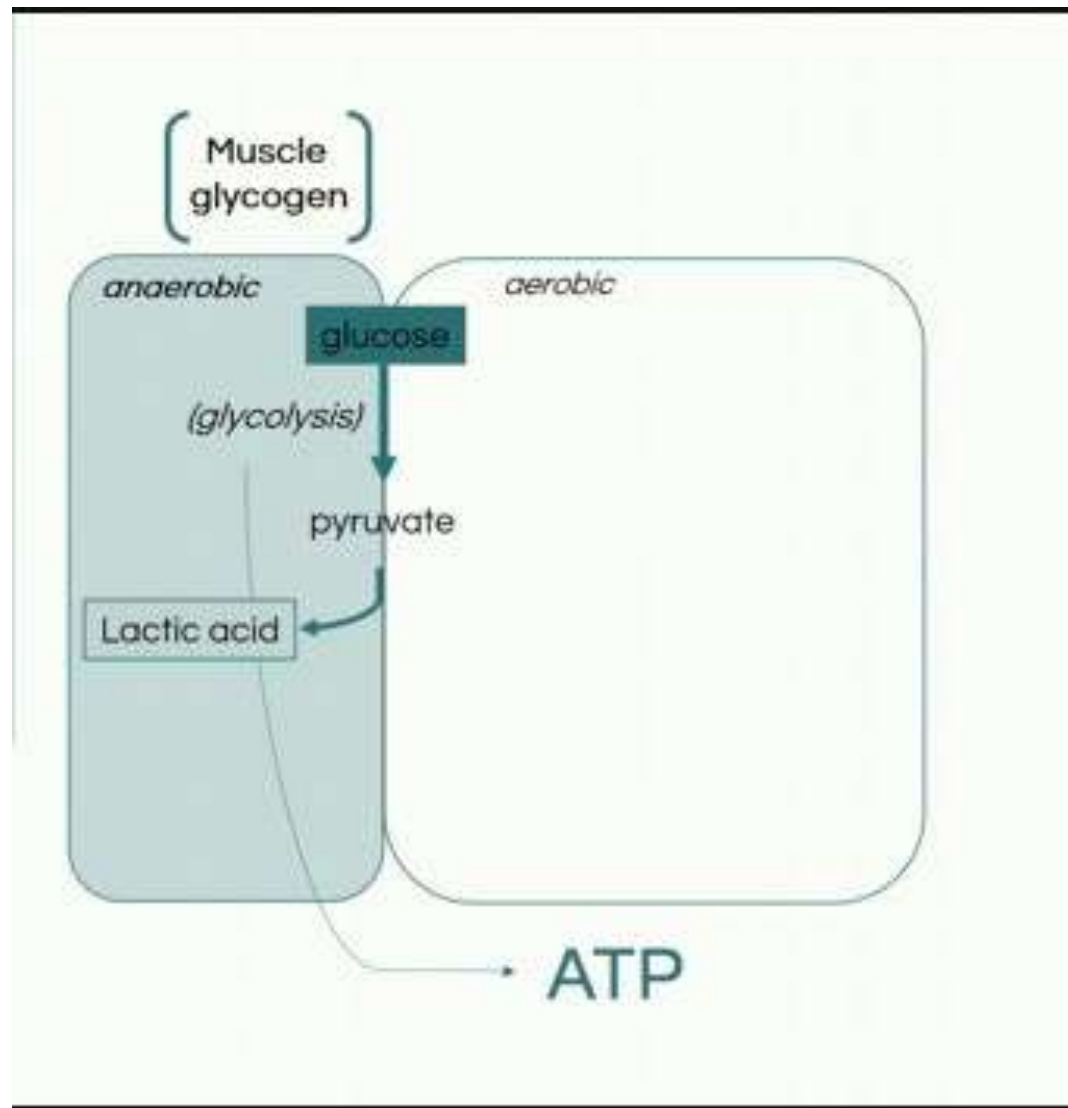


METABOLIZMI ENERGIJITIK

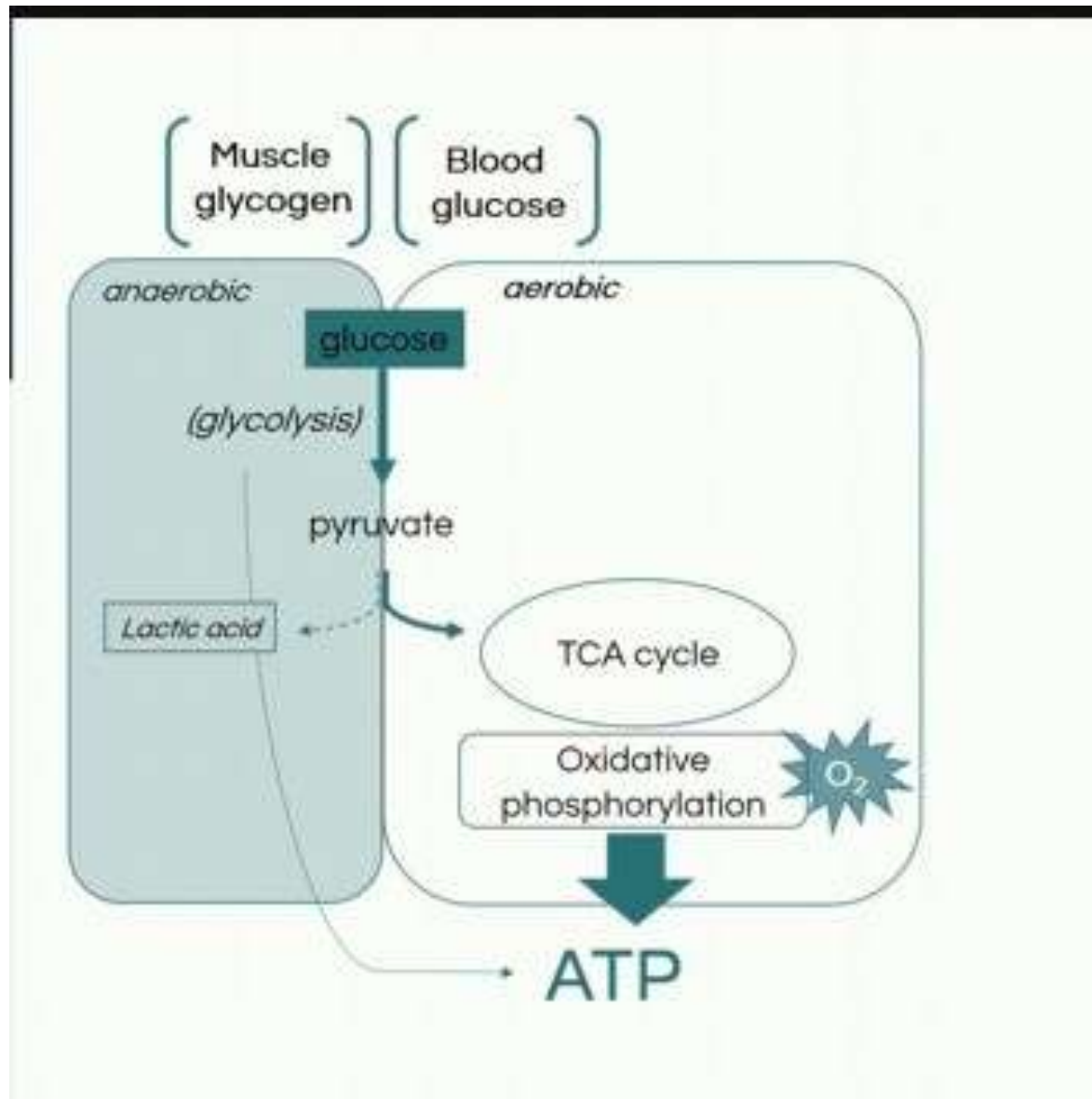
- ATP(adenosine triphosphate)- energjia qe djeg trupi yne
- ADP
- Fosfokreatine
- Glikogjeni ne muskujt
- Glikogjeni ne gjak
- Masa dhjamore



METABOLIZMI ENERGIJITIK ANAEROBIK

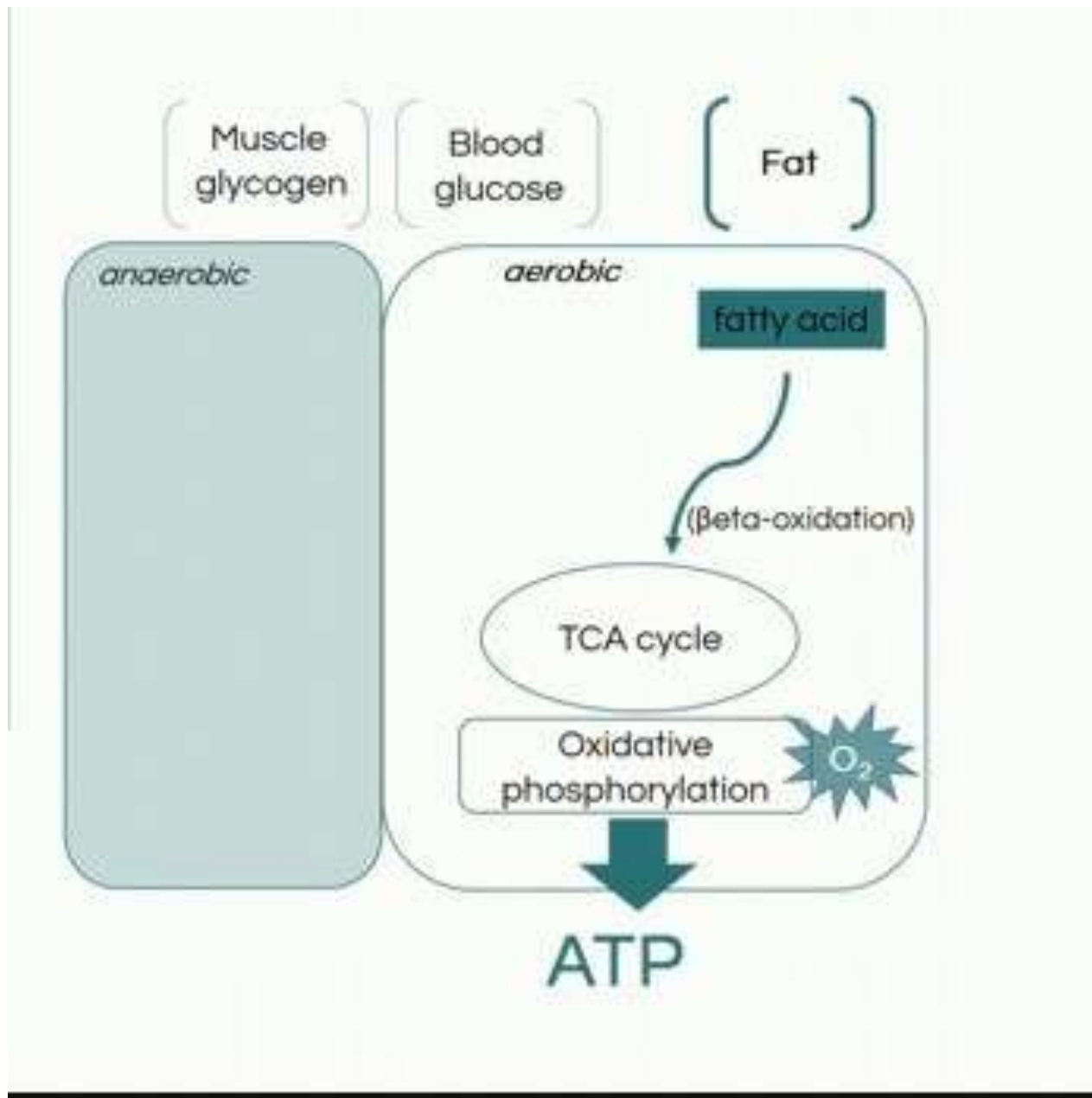


METABOLIZMI ENERGIJITIK ANEROBIK



METABOLIZMI ENERGIJITIK

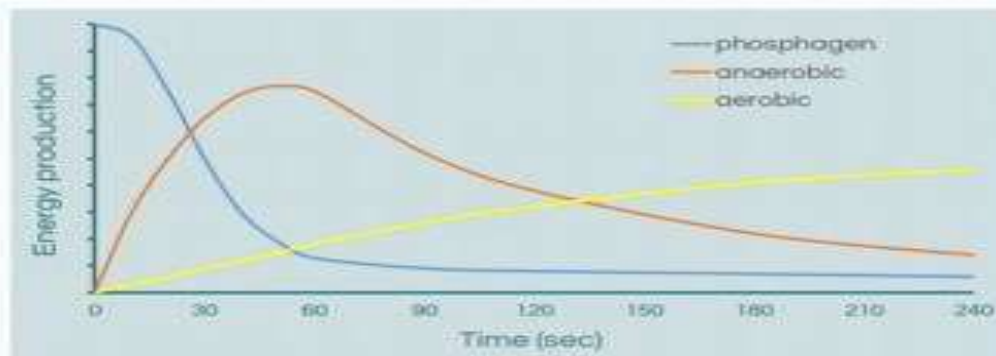
MASA DHJAMORE



METABOLIZMI ENERGIJITIK

	SPEED	DELAY	CAPACITY
Phosphocreatine	++++	Instantaneous	Very small
Anaerobic glycolysis	+++	5-10 s	limited
Aerobic Breakdown			
glucose & glycogen	++	minutes	moderate
Fat	+	long	huge

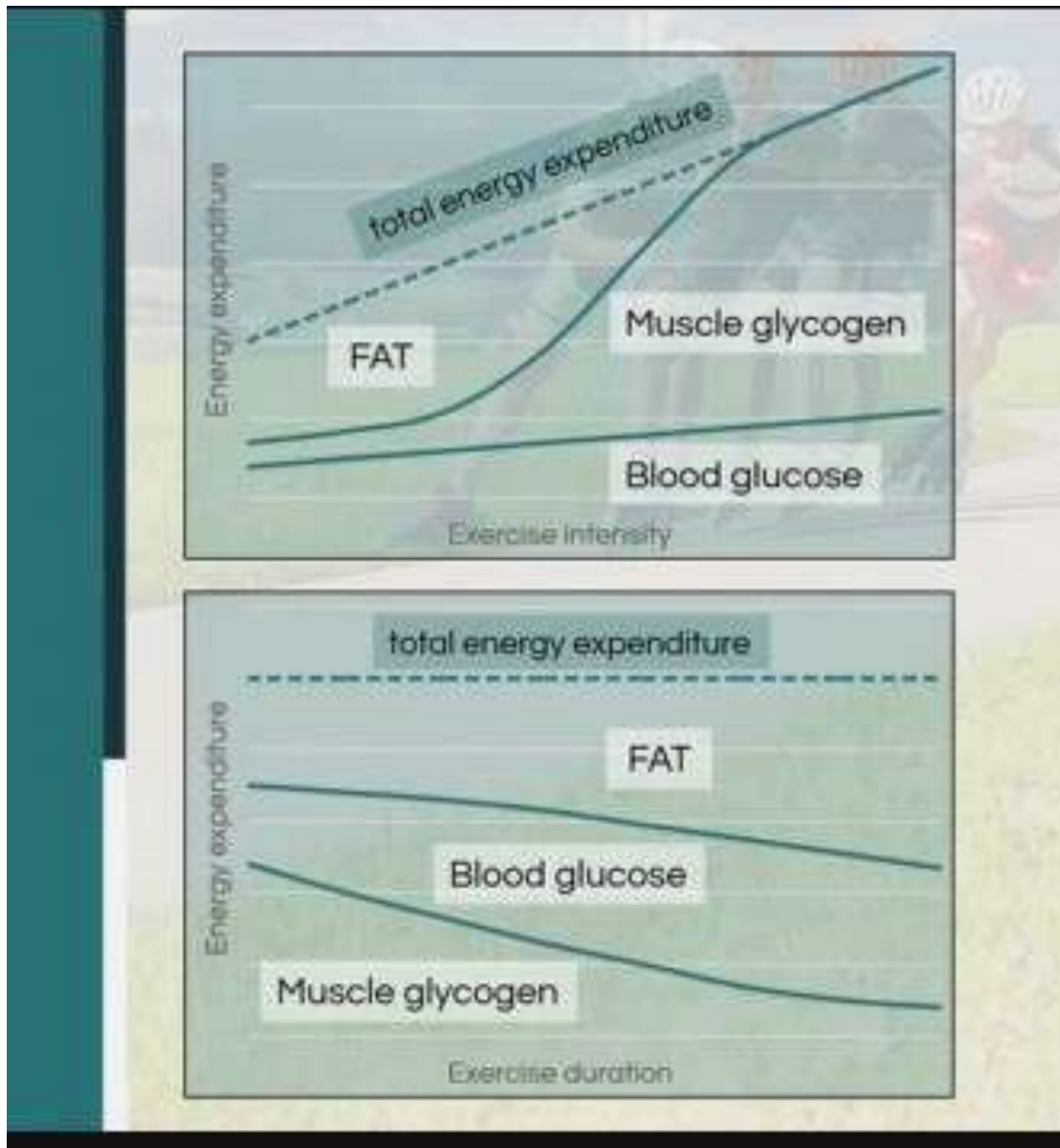
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KARBOHIDRATE / YNDYRE

CARBOHYDRATES	FAT
Glucose	Fatty Acid
blood –borne muscle glycogen	from adipose tissue intramuscular lipids
Anaerobic glycolysis	-
Aerobic system	Aerobic system
Versatile fuel	Non-versatile
more energy per O ₂ -> 'more efficient'	less energy per O ₂ -> 'less efficient'
<i>High intensity (an)aerobic exercise</i>	<i>Moderate-to-high intensity aerobic exercise</i>
Limited stores	Huge stores
<i>Moderate-long exercise</i>	<i>Prolonged exercise</i>

BURIME ENERGJITIKE



OKSIDIMI I YNDYRES VS KARBOHIDRATEVE

FUEL OXIDATION



$$\text{RER} = \text{VCO}_2 / \text{VO}_2$$

- 0.7 -> Fat oxidation
- 1.0 -> Glucose oxidation

Palmitate + 23O_2 -> 16CO_2 + $16\text{H}_2\text{O}$ + energy

$$\text{RER} = 16/23 = 0.70$$

Glucose + 6O_2 -> 6CO_2 + $6\text{H}_2\text{O}$ + energy

$$\text{RER} = 6/6 = 1.0$$

Carbohydrate and Fat as a fuel

- Exercise intensity & duration
- Training & Diet

Optimize endurance performance

- Improve fat oxidation via training
- Optimize carbohydrate availability when competing